## **Cross-zonal Capacities for the IDAs**

## **MCSC TSO perspective**

Version for publication - 20 September 2023

Disclaimer 1: this slide deck presents the situation as of 20 October 2023 (MCCG meeting) and will not be maintained/updated on the ENTSO-E website.

Disclaimer 2: this slide deck was prepared by MCSC TSOs in cooperation with CCR TSOs and does <u>not</u> represent NEMOs point of view.

#### Introduction

#### Background

- This slide set was prepared by MCSC TSOs. It aims at answered the following points:
  - $\circ$  Understanding whether the recalculation is expected by TSOs in various CCRs.
  - The status quo on bidding zone borders related to the set-up shall be presented in a consistent way, explaining approaches and clarifying the terminology used (whether leftover, recalculation or assessment).
- The slide set aims at reflecting the expected approach at IDA Go-live. A general binary (i.e. cross-zonal capacity for/between IDAs or not) overview is provided of all CCRs together, supplemented with detailed slides on the capacity calculation process in line with the regional capacity calculation methodologies per CCR (annex 1). Annex 2 provides background information on the CCRs. Annex 3 and 4 include backup illustrations.

#### Process

- Input to these materials has been provided by MCSC members and taken from the 2023 CC&A ENTSO-E report. All feedback from all CCRs was incorporated.
- Slide 3 & 4 (in adapted format) were presented during the MCCG meeting on 20 October 2023.
- As indicated on the cover slide, this slide deck presents the situation as of 20 October 2023 (MCCG meeting) and will not be maintained/updated on the ENTSO-E website.

# Simplified overview of expected/indicative cross zonal capacities (CZC) for IDA Go-live

No cross-zonal capacities\*



\*In some cases it is not yet confirmed or decided, whether there will be cross-zonal capacities (cf. details on the next slides)

Cross-zonal capacities\* → different approaches possible as detailed on the next slides

#### Overview of approaches used across the CCRs

Below, the different approaches for capacity calculation approaches for IDAs is listed - as indicated by TSOs from the respective CCRs. Terminology being in the same row does <u>not</u> automatically indicate similarity of approaches. Furthermore, letters have <u>no</u> further significance other than differentiating between approaches <u>per CCR</u>.

	Nordic	Hansa	Co	re CCR	IBWT	GRIT	South-West Europe	Baltic	South-East Europe
IDA 1	a) CZCs are leftovers based on D-2 CGM and an extraction taking into account the SDAC allocations.	A) No CZCs B) Leftover CZCs C) Re-calculated CZCs	a) b)	no CZCs (if existing derogation in CCM is applicable) Updated CZC after DA MC: CZCs for ID extracted from the D-2 CGM at DA MCP, but with different parameters for virtual capacities or potential removal of virtual capacities.	a) no CZCs b) Updated CZC after DA MC: CZCs for ID calculated as day- ahead left-over ATC without virtual capacities	a) Intra-Day cross- zonal capacities based on Day- Ahead "left-overs" initially* indicated for all borders for IDA1.	a) DA Leftovers: CZCs leftover after SDAC allocations. These CZCs are extracted based on the regional day-ahead capacity calculation process on D-2	A) DA Leftovers: CZCs leftover after SDAC allocations. These CZCs are extracted based on the regional day-ahead capacity calculation process on D-2	a) DA Leftover: CZCs leftover after SDAC allocations. These CZCs are extracted based on the European wide D-2 CGM (for IDA1)
IDA 2	b) CZCs will be leftovers for IDA go-live but target is to re-assess the CZCs based on D- 1 CGM according to Nordic CCM.	B) Leftover CZCs C) Re-calculated CZCs D) Re-assessed CZCs	c) d)	Updated CZC after DA MC plus Increase/Decrease: same as b) complemented with an optional possibility to increase or decrease capacities on bilateral level based on D-1 CGM Calculated ID CZC (IDCC 1): CZC is calculated based on D- 1 CGM and last available AAC	c) CZCs for ID calculated as day- ahead left-over ATC without virtual capacities d) CZCs for ID calculated as day- ahead left-over ATC with virtual capacities	b) "re-assessed" based on regional D-1 CGM.	b) Re-calculated ID CZC (IDCC1): 1st run of regional intraday capacity calculation process (22:00h D-1). This process was implemented in March 2022	A) DA Leftovers: CZCs leftover after SDAC allocations. These CZCs are extracted based on the regional day-ahead capacity calculation process on D-2	b) Re-assessed based on regional D-1 CGM (for IDA2) .This process was implemented in October 2021
IDA 3	c) CZCs will be leftovers for IDA go-live but target is to re-assess the CZCs based on ID CGM according to Nordic CCM.	B) Leftover CZCs C) Re-calculated CZCs D) Re-assessed CZCs	e) f)	ID capacities available for continuous trading in XBID at 9:45 will also be used for IDA3 until IDCC2 is implemented CZC is calculated based on ID CGM and last available AAC (IDCC2 implementation)	e) CZC re-assessed based on regional ID CGM	c) "re-assessed" based on regional ID CGM.	c) Re-calculated ID CZC (IDCC2) : 2nd run of regional intraday capacity calculation process (10:00h D) Pending implementation	A) DA Leftovers: CZCs leftover after SDAC allocations. These CZCs are extracted based on the regional day-ahead capacity calculation process on D-2	c) Re-assessed based on regional ID CGM (for IDA3) This process was implemented in October 2022

\*Note that the final set-up for Core is dependent on the outcome of the ongoing ACER's referral on the 2<sup>nd</sup> & 3<sup>rd</sup> amendment of Core ID capacity calculation methodology, expected Q4 2023 \*\* For IBWT the target model is under CCR consideration

Annex 1: capacity calculation process per CCR in line with the regional CCMs

## **Capacity Calculation Region Baltics**

- Intra-Day cross-zonal capacities based on Day-Ahead "left-overs" initially\* indicated for all borders and all IDAs.
  - Updated in accordance with Intraday capacities and IDA.



## **Capacity Calculation Region Core**

Possible Capacity Calculation approaches for IDAs and respective status

#### Possible Capacity Calculation Approaches for IDAs and respective status

- For IDA 1 following approaches can be applicable according to current capacity calculation methodology:
  - a) no CZCs (if existing derogation in capacity calculation methodology is applicable)
  - b) Updated CZC after DA market coupling: CZCs for ID extracted from the D-2 common grid model at DA market clearing point, but with different parameters for virtual capacities
- For IDA 2 following approaches can be applicable according to current capacity calculation methodology:
  - c) Updated CZC after DA market coupling plus Increase/Decrease: same as B complemented with an optional possibility to increase or decrease capacities on bilateral level based on D-1 common grid model
  - d) Calculated ID CZC (IDCC 1): CZC is calculated based on D-1 common grid model and SDAC market clearing point
- For IDA 3 following approaches can be applicable according to current capacity calculation methodology:
  - e) ID capacities available for continuous trading in XBID at 9:45 will also be used for IDA3 until IDCC2 is implemented
  - f) CZC will not be updated at planned go-live of IDAs (expected Q2 2024). IDA3 will be fed with the "leftover" CZC from Intraday continuous trading. Core TSOs aim to introduce approach F) "Re-Calculated ID CZC (IDCC 2): CZC is calculated based on ID common grid model" at the earliest by Q4 2024, otherwise in 2025.

Note that the final set-up is dependent on the outcome of the ongoing ACER's referral on the 2<sup>nd</sup> & 3<sup>rd</sup> amendment of Core ID capacity calculation methodology, expected Q4 2023

- For IDA 1: If IDA1 is introduced less than 6 months after the Go Live date of IDCC1 it depends on whether Core TSOs will
  apply the derogation period or decide to provide b). Current ACER opinion is that the derogation period should end at IDA golive.
- For IDA 2: If IDCC1 goes live before IDA, approach d) is used. If IDCC1 goes live after IDA, approach c) is used.
- For IDA 3: Go Live date of IDCC2 providing a new recalculation of capacity for IDA3 is expected to be 1 year after IDCC1 go live, pending the decision by ACER on the ID capacity calculation methodology.



### **Capacity Calculation Region GRIT**

- Intra-Day cross-zonal capacities based on Day-Ahead "left-overs" initially\* indicated for all borders for IDA1.
- For IDA2: "re-assessed" based on regional D-1 common grid model.
- For IDA3: "re-assessed" based on regional ID common grid model.



## **Capacity Calculation Region Hansa**

- As indicated in the 2023 Market Report: ID(A) CZCs are recalculated for DK2-DE/LU for all applicable MTUs and are re-assessed for all other CCR Hansa bidding zone borders by the RCCs once updated ID common grid models are available.
- For ID(A) go-live, A), B) and C) are going to be used, whereas A) might be considered exclusively for IDA1 at DE/DK1 as an option. Option D) is aimed at
  being implemented in the future for IDAs 2 and 3. For now, updated D-1 and ID common grid models will not yet be available, and hence CZCs are leftovers
  (if possible) based on D-2 common grid model for bidding zone borders other than DK2-DE/LU.
- Terminology explanations:
  - A) no CZCs (if existing derogation is applicable)
  - B) Leftover: CZCs leftover after SDAC allocations. These CZCs are based on the European wide D-2 CGM
  - C) Re-calculated: e.g. for DE/LU-DK2 capacities are re-calculated every 15 min. and updated every 60 min., based on the latest wind forecast.
  - D) Re-assessed: CZCs are based on new regional D-1 CGM (for IDA2) and ID-CGM (for IDA3) and the SDAC allocations + latest SIDC allocations



## **Capacity Calculation Region IBWT**

- For IDA 1 following approaches can be applicable:
  - a) no CZCs
  - b) Updated CZC after DA market coupling: CZCs for ID calculated as day-ahead left-over available transfer capacity without virtual capacities
- For IDA2(\*):
  - c) CZCs for ID calculated as day-ahead left-over available transfer capacity without virtual capacities
  - d) CZCs for ID calculated as day-ahead left-over available transfer capacity with virtual capacities
- For IDA3: CZC re-assessed based on regional ID common grid model



## **Capacity Calculation Region Nordics**

#### Possible Capacity Calculation Approaches for IDAs and respective status

- For IDA1 the CZCs are leftovers based on D-2 common grid model and an extraction taking into account the SDAC allocations.
- For IDA2 CZCs will be leftovers for IDA go-live but target is to re-assess the CZCs based on D-1 common grid model according to Nordic capacity calculation methodology.
- For IDA3 CZCs will be leftovers for IDA go-live but target is to re-assess the CZCs based on ID common grid model according to Nordic capacity calculation methodology.



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### **Capacity Calculation Region SEE**

- Intra-Day cross-zonal capacities based on Day-Ahead "left-overs" initially\* indicated for all borders for IDA1.
- For IDA2: "re-assessed" based on regional D-1 common grid model.
- For IDA3: "re-assessed" based on regional ID common grid model.



## **Capacity Calculation Region SWE**

- Intra-Day cross-zonal capacities based on Day-Ahead "left-overs" indicated for all borders for IDA1.
- Intra-Day cross-zonal capacities based regional IDCC1 indicated for all borders for IDA2.
- For IDA3: SWE CCR target objective is to have a recalculation for IDA3, based on IDCC2 process (pending implementation). Unless final go-live date of IDCC2 is reached before IDA go-live, IDA3 cross-zonal capacities will be based on IDCC1 "left-overs" after IDA2 and continuous trading allocations.



Annex 2: Background per CCR

## **TSO-only: Capacity Calculation Regions**

The following slides provide an overview of the Day-ahead and intraday implementation milestones of the different CCRs. This includes the following:

Capacity calculation region	Approach implemented	Coordinated capacity calculator(s)	Implementation date	
			day-ahead	intraday
Nordic	Flow-based (FB)	Nordic Regional Coordination Centre	Exp. Q1 2024	Dependent on readiness of FB in SIDC
Hansa	coordinated NTC (cNTC)	Nordic Regional Coordination Centre & TSCNET Services	Exp. Q2 2024	Exp. Q2 2024
Core	Flow-based (FB)	Coreso & TSCNET Services	9 June 2022	Transitional solution using leftovers from the day-ahead cross-zonal capacities: Implemented (Q2 2022) Target solution IDCC1: Implementation date unknown, subject to ACER decision process on ID CCM. Earliest Q1 2024 Target solution for IDCC2: 12 months after Calculated ID CZC (IDCC 1) at 21:45 and subject to ACER procedure to adopt decision on 2nd and 3rd amendment of the Core ID CCM
Italy North	coordinated NTC (cNTC)	Coreso & TSCNET Services	1 November 2021	1 November 2021
Greece-Italy	coordinated NTC (cNTC)	Southeast Electricity Network Coordination Centre (SEleNe) capacity calculation	3 August 2021	29 September 2021 (only IDCC2) January 2023 (IDCC1)
South-West Europe	coordinated NTC (cNTC)	Coreso	Implemented (Q1 2020)	15 March 2022 (IDCC1) May 2024 (IDCC2)
Baltic	coordinated NTC (cNTC)	Baltic Regional Coordination Centre	Exp. 2025	Exp. 2025
South-East Europe	coordinated NTC (cNTC)	Southeast Electricity Network Coordination Centre (SEleNe) capacity calculation	1 July 2021	1 October 2021 (1 <sup>st</sup> Intraday) 1 October 2022 (2 <sup>nd</sup> Intraday)

## **TSO-only: Capacity Calculation Region Baltics**

- The Baltic TSO-s investigated the effectiveness of implementing the FB capacity calculation approach in the Baltic CCR. T was that the FB capacity calculation approach is technically feasible for application in the Baltic CCR.
- However, based on the outcome of the socioeconomic welfare and operational security assessment, it was concluded that
  calculation methodology using the FB approach would not yet be more efficient compared to the current capacity calculatic
  comparable level of operational security in the Baltic CCR.
- The Baltic CCR developed a cNTC approach for CZC calculation and allocation.
- By Q4 2018, the Baltic CCR TSOs received approval from the relevant NRA and started preparing to implement the Baltic

Planned milestone(s)	Planned milestone(s)		
Quarter	Description		
Q4 2023	Preparation of the new re-developed Baltic CCR cNTC CCM		
2025	Implementation of Baltic CCR cNTC CCM		

Table 50: Baltic CCR: Planned milestone(s)



#### Contact details: not available

# Capacity Calculation Region Core Overview of DA & ID CC milestones

Closed milestone(s) for DA & ID capacity calculation processes		
Quarter	Description	
Q2 2021	Approval of 1 <sup>st</sup> amendment of DA CCM by Core NRAs	
Q3 2021	Start of EXT//run for Core FB DA CC & MC	
Q4 2021	Go-live of Improved Coordination Solution (ICS)	
Q2 2022	Adoption of decision on 1 <sup>st</sup> amendment of ID CCM by ACER Go-live of Core FB DA CC & MC Go-live of Core FB ID CCM transitional solution (as depicted by the 1 <sup>st</sup> ID CCM amendment)	
Q4 2022	Submission of 2 <sup>nd</sup> ID CCM amendment (ROSC aligned business process) Start of EXT//run for Core FB IDCC1	
Q1 2023	Submission of 3 <sup>rd</sup> ID CCM amendment (ATC based validation)	
Q2 2023	Submission of 2nd DA CCM amendment (AHC implementation)	



#### Planned milestone(s) for DA & ID capacity calculation processes

Quarter	Description	Remarks
Q4 2023	Submission of 3 <sup>rd</sup> DA CCM amendment (Post go-live studies)	
Q1 2024	Implementation of 10% DA FRM	
2024	Go-live Calculated CZC IDCC1 (input for IDA2)	• Planning is unconfirmed, due to ongoing ACER decision process on the 2 <sup>nd</sup> and 3 <sup>rd</sup> Amendment of the Core ID CCM.
2024	Go-live updated CZC after DA MC (DA leftover provision) at 15:00 (input for IDA1)	<ul> <li>Planning is dependent on go-live of IDCC1.</li> <li>According to ID CCM, DA leftover capacities are to be provided latest as of 6 months after IDCC1 go-live</li> <li>Core TSOs strive to provide DA leftovers at 15:00 not later than IDA go-live.</li> </ul>
Earliest Q4 2024	Go-live re-calculated ID CZC IDCC2 (input for IDA3)	<ul> <li>Planning is dependent on go-live of IDCC1.</li> <li>According to ID CCM, IDCC2 is to be implemented within 12 months after IDCC1.</li> </ul>
Q3 2025	Implementation of DA Advanced Hybrid Coupling (AHC)	
Q4 2025	Implementation of DA Coordination Validation	

#### More information: https://www.entsoe.eu/bites/ccr-core/about/

**Chair:** George Visan (george.visan@transelectrica.ro)

### **TSO-only: Capacity Calculation Region GRIT**

- The GRIT capacity calculation methodology for the DA and ID timeframes was approved by GRIT NRAs on 9 December 2020.
- For the DA and ID timeframes, the GRIT TSOs implement a cNTC approach.

Closed milestone(s)	Closed milestone(s)		
Quarter	Description		
Q3 2017 Submission of the GRIT DA CC methodology to the NRAs			
Q1 2018 Request for amendment of the CACM CC methodology for DA and ID timeframes received by the GRIT NRAs			
Q2 2018	The GRIT TSOs to re-submit amended CACM CC methodology proposal for DA and ID timeframes		
Q3 2018	The GRIT NRAs to approve the CACM DA and ID CC methodology *		
Q4 2020	The GRIT NRAs approved the CACM DA and ID CC methodology.		
Q3 2021	Go-Live DA capacity calculation.		
Q4 2021	Go-Live ID (10:00 D) capacity calculation		
Q1 2022	Submission of the GRIT BT CC methodology to the NRAs		
Q4 2022 Go-Live ID (22:00 D-1) capacity calculation.			



Table 32: GRIT CCR: Closed milestone(s) for DA and ID capacity calculation processes. See here.

## **TSO-only: Capacity Calculation Region Hansa**

- It should be noted that the CCM for the Hansa CCR is interlinked with the CCMs being developed in the Nordic CCR and Core CCR.
- As the Hansa CCR has the unique feature of all BZs being currently connected by radial lines, the assessment of cross-border capacity can be split into three separate parts, which allows the TSOs to examine the impact of cross-border trade independently on each part of the grid.
- The methodology for the Hansa CCR is, therefore, a cNTC methodology for both DA and ID.
- ID(A) CZCs are recalculated for DK2-DE/LU for all applicable MTUs and are re-assessed for all other CCR Hansa BZBs by the RCCs once updated ID CGMs are available.

Closed milestone	Closed milestone(s)			
Quarter	Description			
Q3 2017	The Hansa CCR TSOs run a public consultation on the ID and DA CCM proposal			
Q3 2017	The Hansa CCR TSOs submitted the ID and DA CCM proposal for NRA approval			
Q1 2018	The Hansa CCR NRAs submitted Request for Amendment to the ID and DA CCM proposal			
Q3 2018	The Hansa CCR TSOs handed in Request for Amendments to the ID and DA CCM proposal			
Q4 2018	The Hansa CCR NRAs approved the amended ID and DA CCM proposal			
Q1 2019	ACER's amendment of the determination of CCRs, COBRAcable included			
Q2 2019	The Coordinated Capacity Calculators are appointed			
Q3 2020	The Hansa CCR NRAs submitted Requests for Amendments to the ID and DA CCM			
Q4 2020	The European Commission published its decision on KF CGS derogation			
Q4 2020	The Hansa CCR TSOs ran a public consultation on the amendment of the ID and DA CCM			
Q4 2020	Phase 1 of ID & DA CCM implementation completed for Hansa interconnectors (except NordLink scheduled for 2021)			
Q1 2021	The Hansa CCR TSOs submitted the amendments to the ID and DA CCM			
Q2 2021	ACER's amendment of the determination of CCRs, Baltic Cable AB included			
Q2 2021	Phase 1 of ID and DA CCM implementation for NordLink			
Q1 2022	TSOs submitted amendments to the DA fallback methodology (CACM Article 44)			
Q1 2022	TSOs submitted amendments to the Redispatch and Countertrading Cost Sharing methodology (CACM Article 74)			
Q2 2022	NRAs approved DA fallback			
Q4 2022	NRAs approved RCCS Art74			
Q4 2022	Phase 2 of DA/IDCCM implementation			
Q4 2022	TSOs submitted EB CCM (EBGL Article 37)			

Planned milestone	Planned milestone(s)			
	Description			
Q1 2023	Phase 2 ID/DA CCM Implementation continues			
Q1 2023	TSO conducted public consultation on DA/ID CCM			
Q2 2023	ACER decision on Norwegian borders to CCR Hansa			
Q3 2023	EB CCM Implementation activities approved by NRAs			
Q3 2023	Phase 2 DA/ID CCM Implementation complete			
Q3 2023	Phase 3 implementation begun			
Q4 2023	Assess readiness for ID auctions go-live			

Table 11: Hansa CCR: Planned milestone(s) for DA and ID capacity calculation processes



Table 10: Hansa CCR: Closed milestone(s) for DA and ID capacity calculation processes

Contact details: j.glegola@accenture.com; Chairman: Morten Pindstrup

## **TSO-only: Capacity Calculation Region IBWT**

- According to the CACM Regulation, the long-term objective for the Italy North Region will be to implement an FB capacity
- calculation methodology. In the meantime, the TSOs of the Region have developed and implemented methodologies based on the CNTC approach.
- In this methodology Swissgrid is technically fully included as a Technical Counterparty. This means that the border CH-IT is treated in the same manner as
- the other borders in the Italy North region from the technical perspective of Capacity Calculation.

Closed milestone	Closed milestone(s)			
Quarter	Description			
Q1 2016	Go-live for the D-2 capacity calculation			
Q2 2017	Implementation phase and internal parallel run for the ID capacity calculation covering hours 16 h - 24 h for XBID2 auction.			
Q3 2019	External parallel run for the ID capacity calculation covering hours 16 h - 24 h for auction.			
Q4 2019	Go-live for the ID capacity calculation covering hours 16 h = 24 h for auction			
Q4 2019	Approval of first COM version			
Q3 2020	Approval of updated CCMs including provisions from CEP by NRAs			
Q2 2021	Go-live of CNEC selection in D2CC and IDCC			
Q2 2021	Go-live of Daily Data Publication			
Q4 2021	Go-Live of Adjustment for Minimum Capacity in D2CC and IDCC			
Q1 2022	Go-Live of Allocation Constraint Removal in D2CC and IDCC			
Q1 2022	Go-Live of IDCCv1 Extension (12h - 24h)			
Q4 2022	Go-Live Handling PiSa HVDC in capacity calculation			
Q4 2022	Go-Live Handling Pisa HVDC in capacity calculation			



Planned milestone(s)				
Quarter	Description			
Q4 2023	Go-live of Export Corner - optimisation of CC process to include export direction			
Under CCR evaluation	Go-live of IDCCv2 (additional capacity calculation in D-1 for 24h)			

Table 21: Italy North CCR: Closed milestone(s) for short-term capacity calculation and allocation

#### Contact details: Not available

Table 22: Italy North CCR: Planned milestone(s) for short-term capacity calculation and allocation

## **TSO-only: Capacity Calculation Region Nordics**

- The Nordic CCM for the DA and ID timeframes was approved by the Nordic national regulatory authorities (NRAs) on 14 October 2020.
- For both the DA and ID timeframes, the Nordic TSOs implement a FB capacity calculation approach
- Until the single ID coupling can support the allocation of CZCs based on FB parameters, the capacity calculation coordinator (CCC) will transform the FB
  parameters into available transfer capability (ATC) as a transitional solution.

Closed milestone(s)	Closed milestone(s)		
Quarter Description			
Q3 2018	NRA approval of the CCR Nordic CCM proposal		
Q4 2018	NRA request for amendment <sup>o</sup>		
Q4 2019	NRA approval of the amended CCR Nordic CCM proposal		
Q4 2020	NRA approval of the second amended CCR Nordic CCM proposal		
Q1 2022	Start of the External Parallel Run (EPR)		

Table 7: Nordic CCR: Closed milestone(s) for short-term capacity calculation and allocation

Planned milestone(s)				
Quarter	Description			
Q2 2023	ACER decision on Norwegian borders to CCR Nordic			
Q1 2024	Nordic DA CCM and ID CCM go-live window			

Table 8: Nordic CCR: Planned milestone(s) for short-term capacity calculation and allocation



Contact details: Nordic RCC website

## **TSO-only: Capacity Calculation Region SEE**

- According to Art. 20(4) of CACM 'after at least all South East Europe Energy Community Contracting Parties participate in the single DA coupling, the TSOs from at least Croatia, Romania, Bulgaria and Greece shall jointly submit a proposal to introduce a common capacity calculation methodology using the FB approach for the DA and ID market timeframe'.
- However, until now the market coupling of the DA markets between Greece–Bulgaria–Romania and the Western Balkan countries (i.e. Serbia, Kosovo, Bosnia & Herzegovina, North Macedonia, Albania, Montenegro) hasn't been launched, the FB approach cannot be applied and the coordinated NTC is used.

Closed milestone(s)	
Description	
SEE CCR TSOs' submission of the SEE short-term CCM (DA and ID) to the SEE CCR NRAs	
SEE CCR NRAs approval of the SEE short-term CCM (DA and ID) submitted by the SEE CCR TSOs	
Establishment of the SEleNe capacity calculation	
SEE CCR TSOs' submission of Version 1 of the SEE short-term CCM (DA and ID) to the SEE CCR NRAs	
SEE CCR NRAs' approval of the SEE short-term CCM submitted by the SEE CCR TSOs	
Go-live of the DA capacity calculation	
Go-live of the 1" ID capacity calculation	
Go-live of the 2 <sup>nd</sup> ID capacity calculation	
	Description           SEE CCR TSOs' submission of the SEE short-term CCM (DA and ID) to the SEE CCR NRAs           SEE CCR NRAs approval of the SEE short-term CCM (DA and ID) submitted by the SEE CCR TSOs           Establishment of the SEIeNe capacity calculation           SEE CCR TSOs' submission of Version 1 of the SEE short-term CCM (DA and ID) to the SEE CCR NRAs           SEE CCR NRAs' approval of the SEE short-term CCM submitted by the SEE CCR TSOs           Go-live of the DA capacity calculation           Go-live of the 1" ID capacity calculation           Go-live of the 1" ID capacity calculation

Table 52: SEE CCR: Closed milestone(s) for DA and ID capacity calculation processes

Planned milestone(s)			
Quarter	Description		
Q3 2023	SEE NRAs is expected to provide feedback to the amendments to the DA and ID CCM		

Table 53: SEE CCR: Planned milestone(s) for DA and ID capacity calculation processes

Contact details: Not available



## **TSO-only: Capacity Calculation Region SWE**

- SWE NRAs approved the SWE CCM for the DA and ID timeframes in November 2018.
- For the DA timeframe, the SWE CCR TSOs implemented a cNTC approach in January 2020.
- Concerning the ID capacity calculation 1st run; the SWE CCR TSOs implemented a cNTC approach in March 2022.
- Amendment of SWE CCM for including IDCC processes was approved by SWE NRAs in January 2022.

Planned milestone(s)			
Quarter	Description		
Q1 2024	Go-live of the ID capacity calculation 2nd run		

Table 39: SWE CCR: Planned milestone(s)



Contact details: Not available

Annex 3: Back-up Illustrations



## **Overview of Current CCRs and Synchronous Areas**

## TSO-Only: High-Level TSOs Market Process overview (FCA GL, CACM GL & EB GL)



#### TSO-Only: High-Level TSOs Market Process overview (FCA GL, CACM GL & EB GL)



No parallel processes, solution depends on the regional design. 2) Only in case of market-based allocation and economic efficiency analysis based allocation. Please note that co-optimization is not shown on the slide. 3) The latest possible time of market results publication is D-1 15:30 (in fallback situations).
 This processes are performed close to the delivery date or even after delivery. 5) The implementation design of the co-optimized C2C allocation according to EB Art. 40 and its respective methodology is under discussion until mid-2022. 6) Some TSDs' capacity procument takes place after day ahead energy market

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## TSO-Only: High-Level TSOs Market Process overview (FCA GL, CACM GL & EB GL)

6) Preparation of CGM might be completed close or even after publication deadline. 7) IOCZGOT 15:00 D-1, IDCZ capacity might not be available at IDCZGOT on some interconnections and might be provided only at 22:00 D-1 depending on CCR. Time suspension of the continuous trading for IDAs is 40 min in the target model and one hour in an interim phase of one year. 8) first GCT for the first MTU of the n/sxt day is 23 D-19) first IDCC is carried out ahead of IDA at 10

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